

Notice of Allowability

Application No.

10/774,404

Examiner

Michael V. Battaglia

Applicant(s)

SEO ET AL.

Art Unit

2627

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 13 November 2006.
2. ☒ The allowed claim(s) is/are 1-27 (now renumbered as 1,2,10,19,4,6,5,11,13,12,20,22,21,14,15,23,24,3,7-9,16-18 and 25-27 respectively).
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. 09/359,128.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on November 13, 2006 has been entered.

EXAMINER'S AMENDMENT

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with James G. McEwen on December 6, 2006.

The application has been amended as follows:

- a.) On line 12 of claim 1, "waveform." has been replaced by --waveform, and a width of the first pulse is varied by varying the position of the rising edge.--
- b.) On line 11 of claim 3, "write." has been replaced by --write, wherein the width of the first pulse is varied by varying the position of the rising edge.--
- c.) On line 11 of claim 4, "waveform." has been replaced by --waveform, wherein the width of the first pulse is varied by varying the position of the rising edge.--

Allowable Subject Matter

3. Claims 1-27 are allowed. In regard to claim 1, none of the references of record alone or in combination suggest or fairly teach an adaptive writing method of writing input data on an optical recording medium using a write pulse waveform including a first pulse, a last pulse and a multi-pulse train, comprising: controlling the write pulse waveform based on a **grouping table** to generate an adaptive write pulse waveform by **varying a position of a rising edge of the first pulse** of a mark to be written **according to a length of the mark to be written and/or a leading space**, the **grouping table storing rising edge data of the first pulse of the write pulse waveform varying according to corresponding stored values of lengths of marks to be written**; and optically writing the input data on the optical recording medium using the adaptive write pulse waveform, wherein the generated adaptive write pulse waveform is generated **without regard for a trailing space of a present mark** being written using the adaptive write pulse waveform, **and a width of the first pulse is varied by varying the position of the rising edge.**

In regard to claim 3, none of the references of record alone or in combination suggest or fairly teach an adaptive writing method of writing input data on an optical recording medium using a write pulse waveform including a first pulse, a last pulse and a multi-pulse train, comprising: controlling the write pulse waveform by **varying a position of a rising edge of the first pulse** of a mark to be written **according to a length of the mark to be written and a leading space based on a grouping table**, the grouping table having **rising edge data grouped in pulse groups which group the first pulse of the write pulse waveform grouped according to a first preset length of the mark and space and a second preset length of the mark and**

space to generate an adaptive write pulse waveform; and optically writing the input data on the optical recording medium using the adaptive write, **wherein the width of the first pulse is varied by varying the position of the rising edge.**

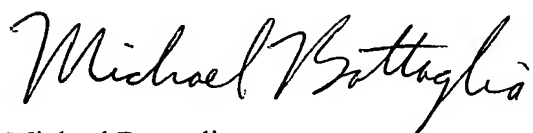
In regard to claim 4, none of the references of record alone or in combination suggest or fairly teach an adaptive writing method of writing input data on an optical recording medium using a write pulse waveform including a first pulse, a last pulse and a multi-pulse train, comprising: controlling the write pulse waveform based on a **grouping table** to generate an adaptive write pulse waveform by **varying a position of a rising edge of the first pulse** of the mark to be written **according to** a length of at least a mark to be written and a leading space, the grouping table storing rising edge data of the first pulse of the write pulse waveform **grouped in corresponding pulse groups according to lengths of marks to be written and lengths of spaces adjacent to the marks to be written;** and optically writing the input data on the optical recording medium using the adaptive write pulse waveform, **wherein the width of the first pulse is varied by varying the position of the rising edge.**

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael V. Battaglia whose telephone number is (571) 272-7568. The examiner can normally be reached on M-F, 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, A. Wellington can be reached on (571) 272-4483. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Michael Battaglia



ANDREA WELLINGTON
SUPERVISORY PATENT EXAMINER